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PACERS - PERFORMANCE AND CURRENT EQUIPMENT REQUIREMENTS/SCHEDUL--ETC(U)
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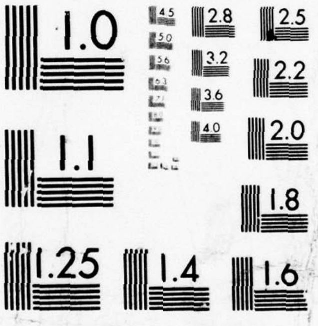

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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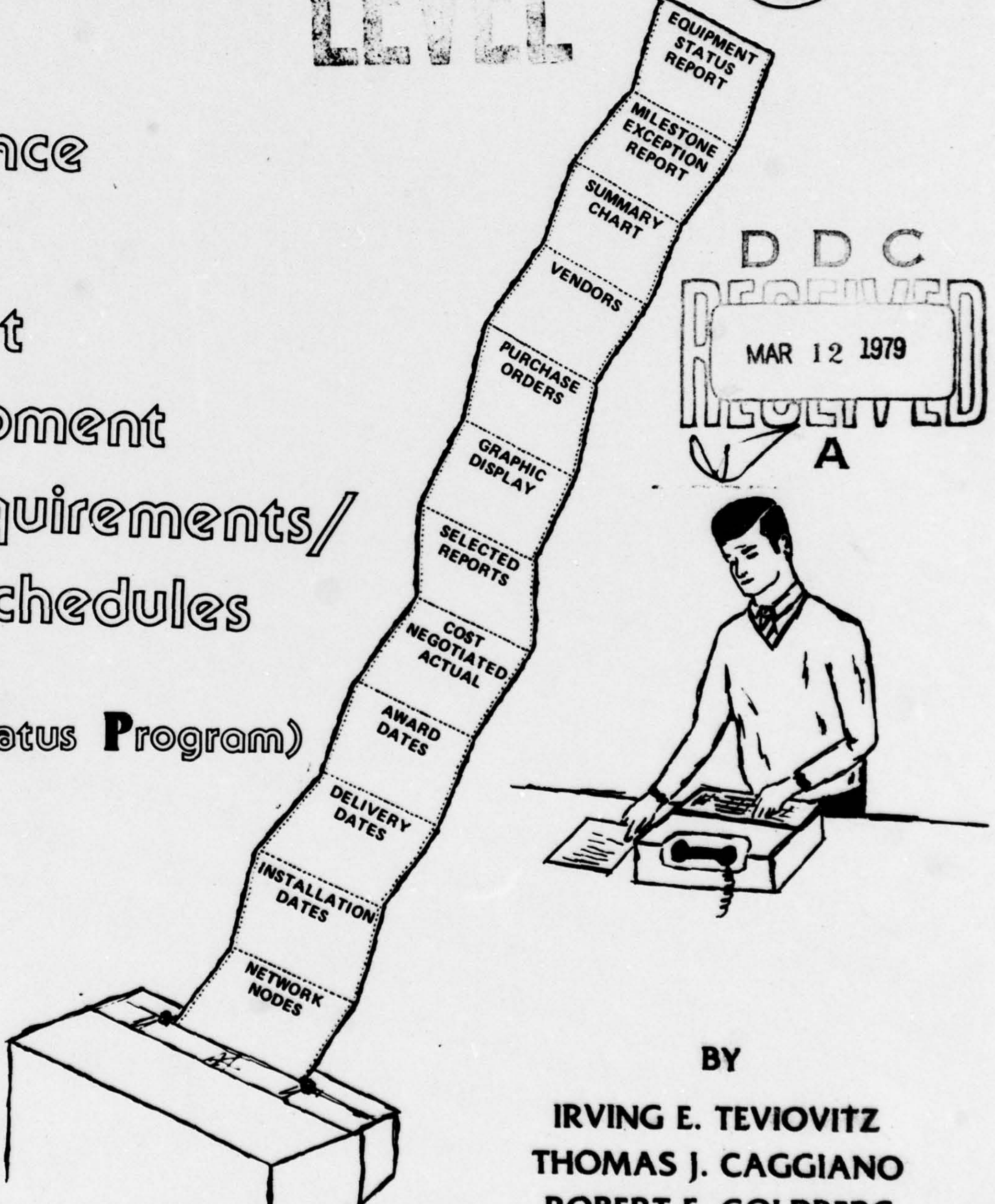
USERS MANUAL

PACERS

2

Performance And Current Equipment Requirements/ Schedules

(Equipment Status Program)



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⑭ MISD-UM-78-7

⑥

PACERS -

PERFORMANCE
AND
CURRENT
EQUIPMENT
REQUIREMENTS/
SCHEDULES,

EQUIPMENT STATUS PROGRAM
(ESP).

⑨ Users manual (Final),

BY

⑩
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THOMAS J. /CAGGIANO
ROBERT E. /GOLDBERG

⑪ Jul 78

JU~~NE~~ 1978

⑫ 78p.

MATHEMATICAL ANALYSIS DIVISION
MANAGEMENT INFORMATION SYSTEMS DIRECTORATE
US ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND
DOVER, NEW JERSEY

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ABSTRACT

PACERS provides management and field personnel with a powerful equipment monitoring program that allows users to track the status of various items. Through interactive computer data base updating, milestone interface dates (i.e. award, delivery, etc.) are analyzed providing the user appropriate managerial diagnostics in project terms. Other information, such as, purchase order numbers, vendors, component names and nomenclature, costs, network numbers may be retained and sorted. Additionally, semi-graphic displays show milestone bar charts for each component item (equipment). The generated equipment status report provides the project's performance and current requirements/schedules for effective project planning and execution.

TABLE OF CONTENTS

I. INTRODUCTION

The Performance and Current Equipment Requirements/Schedules (PACERS) Report describes a computer program developed by the US Army Armament Research and Development Command in conjunction with the Project Managers Office for Munitions Production Base Modernization and Expansion (PBM) to assist the PBM during facility project planning and execution. PACERS uses the Equipment Status Program (ESP) to provide the user an in-depth consolidated overview of facility component items (e.g., equipment), progress and schedule diagnostics covering current and projected areas requiring attention. PACERS provides management and field personnel with a rapid method of effective communication covering numerous execution profiles, such as: Government-Owned Contractor-Operated (GOCO) equipment procurement, installation, rehabilitation, Corps of Engineers (CE) contractor installation, etc.

Once the basic data component list is established, updates are made rapidly in the interactive mode. In addition to the basic Equipment Status Report (ESR), over 1,300 other optional sorted reports may be obtained for improved program visibility, such as: Vendors, Purchase Orders, Milestone Dates (scheduled, actual, critical) for award, deliveries, installation, debugging, rehabilitation, costs, equipment types, process or building areas, etc. A semi-graphical report gives rapid visual review for each item's schedule with abbreviated highlights. An optional milestone exception report provides problem analysis in specific project terminology.

Additional program modifications will be made in the future to further refine data entry options and reports. The ESP will provide abbreviated details on the revisions. To obtain the latest user manual revision, contact ARRADCOM's Management Information Systems Directorate/Mathematical Analysis Division.

11. PRELIMINARY INFORMATION AND DEFINITIONS

PACERS Report uses the ESP, an interactive computer program that enables the user to update and modify a formatted data base. ESP also allows a wide range of information reports and displays to track the disposition of equipment in several different implementation approaches. Before using ESP, an initial data base must be formed. See Appendix A, page 31, for creation and sample of the data base.

ESP is principally based on tracking five milestone dates for each piece of equipment, component set or subset. Presently programmed are four implementation profiles (0, 1, 2, 3). At this point, the reader may wish to look at pages 40-43 and 49-50 for typical report outputs. The user selects the profile which has associated milestones closest to his project. The profiles, columns, and associated milestones are as follows:

Profile:	A	B	C	D	E
0	Award	Delivery	Transfer	CSTRT	CPNSH
1	Rehab	Transfer	Instl Start	Instl Complete	Debug
2	Rehab	Instl Start	Instl Complete	Transfer	Debug
3	Award	Delivery	Instl Start	Instl Complete	Debug

Definitions:

Award - Purchase Order is signed
CSTRT - Earliest Construction Instl Start Date
CFNSH - Latest Construction Instl Start Date
Debug - Item checkout is complete
Delivery - Item is delivered on site
Instl Start - Instl of item is begun
Instl Compl - Instl of item is finished
Rehab - Modification of item is complete
Transfer - Possession of item is officially transferred from the government to the contractor

Each milestone covers three situations: Schedule (S), Actual (A), and Critical (C). For every piece of equipment, there may be fifteen separate and distinct dates at the user's option.

A two letter symbol is used to reference each of the fifteen positions in the date matrix (i.e., AS - Column A Scheduled, DA - Column D Actual, BC - Column B Critical). This two letter symbol plus the profile selected specifies the milestone.

The user stores the data on a permanent file. To make changes, one attaches the permanent file with local file name ODB (Old Data Base) and executes ESP to update ODB to NDB (New Data Base) and/or generate file ESR with all the reports and displays.

The reports are:

a. Always generated:

ESR (Equipment Status Report) - A complete list of items in order of equipment number separated by process area, building, or other method of characterization - Sample Appendix B, page 37.

Graphical Display - A condensed semi-graphical list of all items in order of equipment number. This display is used to quickly check milestone dates and obtain a visual overview of the prior performance and current requirements/schedules - Sample Appendix C, page 45.

b. Specifically requested:

SDR (Sorted Dates Report) - Reports that present sorted items in order of any of the fifteen dates from the date matrix selected by the user - Sample Appendix D, page 51.

MER (Milestone Exception Report) - A report only listing items where milestone dates are within two months, past due, or improperly scheduled (i.e., delivery date is scheduled before award date) - Sample Appendix E, page 57.

SR (Special Reports) - Optional reports that present sorted items by the following categories: Network Number, Purchase Order, Vendor, Equipment Symbol, Purchase Order Cost, Final Cost, Floating Point Number, Hollerith or Comment. Sorting by category can include: All items; only items with Actual Award or Rehab dates (Date Array, Column A, Row 2); only items with a Scheduled Award or Rehab dates.

	Column A, Row 1); or only items in the Milestone Exception Report. In addition, for Network Number, Vendor, Hollerith, or Comment, the sort can be given selection within the category (i.e., a particular vendor) - Sample Appendix F, page 65.
Summary Chart -	This chart gives a synopsis of Columns A, B, C, D and E as total percent actual dates, as well as total cost data. This chart is not on file ESR, but is printed at the terminal - Sample Section III, page 13.

III. INSTRUCTIONS FOR EXECUTING THE "ESP" COMPUTER PROGRAM

Note: UNDERLINED STATEMENTS - Computer generated instructions and responses.
STATEMENTS ALL IN CAPITALS BUT NOT UNDERLINED - User generated responses.
(Statements in parenthesis) - User manual instructions and information.
?? - User responses entered here.

Figure 1 on page 10 shows one type of remote terminal that can be used.

After the user has initialized the terminal and established communications with the CDC 6000 computer by dialing the appropriate telephone number, the INTERCOM system then requests the user's identification. The sequence follows:

INTERCOM responds with its identification and asks the user to please login (reference 2).

```
CONTROL DATA INTERCOM 4.5
DATE 03/09/78
TIME 09.39.52

PLEASE LOGIN
```

The user replies by typing the word login followed by a RETURN key.

```
LOGIN.
```

Next, INTERCOM responds by asking for a user name.

```
ENTER USER NAME-
```

The user name looks like the following:

```
UUUUXXXYYY
```

It contains the following information:

UUUU - a unique 4 alphanumeric character user identification assigned by MISD of ARRADCOM, Dover, N.J.

XXX - a three digit cost center number

YYY - a three digit charge code

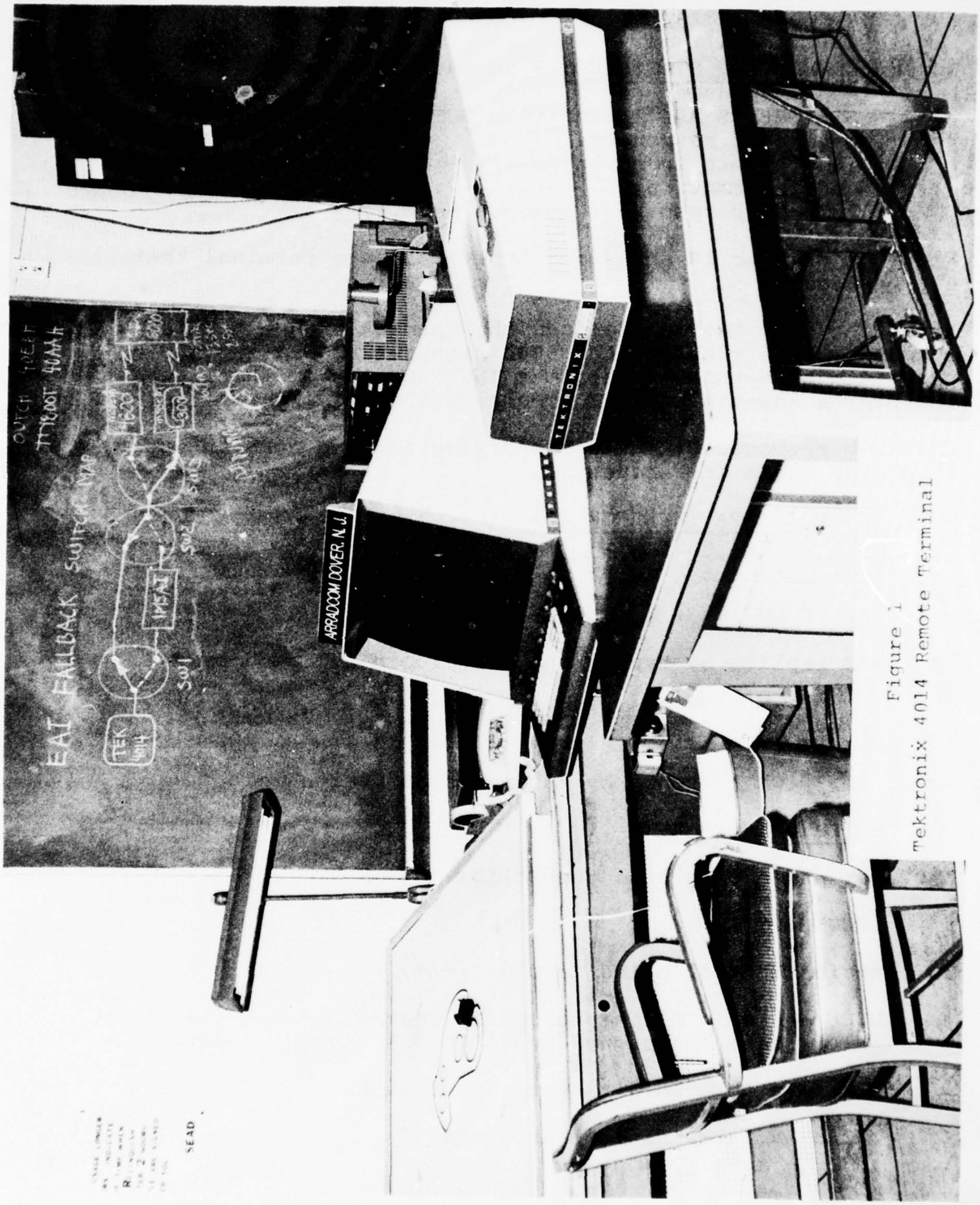

Figure 1
Tektronix 4014 Remote Terminal

SEAD

After typing in the user's name followed by a RETURN key, INTERCOM will respond and ask for the password associated with that user name if it is a valid name.

```
xxxxxxxxxx ENTER PASSWORD-
```

If it is correct, INTERCOM will acknowledge with the following:

```
03/09/78       LOGGED IN AT 09.40.40
               WITH USER-ID XX
               EQUIP/PORT 41/010
COMMAND-
```

INTERCOM is now in conversational mode and waiting for the user to enter a command. At this time enter the following INTERCOM commands:

```
COMMAND- ETL,60.

COMMAND- ATTACH,ODB,****,ID=YYY,CY=ZZ.
           (ODB - Mandatory Local File Name (Old Data
           Base)
           **** - Permanent File Previously Used To Store
           Data Base
           YYY  - ID Name Usually Your Last Name
           ZZ   - Cycle on Which Data Is Stored)

COMMAND - BEGIN,ESP,/TEVIOVITZ.

// OLD DATA BASE (ODB) IS NOW BEING READ

// READY FOR USER'S CHANGES TO DATA BASE

?? (Data base changes are made here - see Section IV)
   (See next line if no changes are to be made)

?? END (Type when finished making data base changes or
   when one doesn't want to make any changes to data
   base).

// NEW DATA BASE IS NOW BEING WRITTEN ON FILE NDB
```

// EQUIPMENT STATUS PROGRAM REPORT IS NOW BEING WRITTEN ON FILE ESR

// DO YOU WANT THE CRITICAL DATES ON THE GRAPHICAL DISPLAY AS WELL AS THE SCHEDULED AND ACTUAL DATES? RESPOND BY TYPING YES OR NO.

?? (Type YES or NO)

// SUMMARY CHART, TYPE YES OR NO

?? (Type YES or NO)
(If your response is no, the Summary Chart will not be generated and the next computer response to appear will be (2), otherwise (1) will appear.)

(1) // ON TEKTRONIX GRAPHICS TERMINAL PUSH PAGE KEY FOLLOWED BY RETURN KEY

SAMPLE SUMMARY CHART

```
-----------------------------------------------------


 PROJ 575ZZZZ TEST CASE PLANT
   GOVERNMENT ARMY AMMO PLANT

PERCENT A                =          72.00
PERCENT B                =          24.00
PERCENT C                =           8.00

NEGOTIATED COST =                    151.641
CALCULATED PURCHASE COST =           151.776   ACTUAL PURCHASE COST =   103.690
CALCULATED FINAL COST =              152.161   ACTUAL FINAL COST =       37.420



-----------------------------------------------------
```

THIS CHART SUMMARIZES THE TOTAL PERCENT OF ACTUAL TO TOTAL DATES FOR EACH OF THE FIVE MILESTONE COLUMNS (A, B, C, D, E) (SEE PAGE 6), AS WELL AS THE TOTAL COST DATA.

(2) // SORTED DATES REPORTS, TYPE YES OR NO

?? (Type YES or NO)
(If YES, (3) will appear; otherwise (4) will appear)

(3) // TYPE REPORTS WANTED AS, DA, ETC., UP TO 15

?? (Type reports wanted. See Section IV, para 1, page 16, for the 15 choices)

// ONLY PAST DUE REPORT, TYPE YES OR NO

?? (Type YES or NO)

(4) // MILESTONE EXCEPTION REPORT, TYPE YES OR NO

?? (Type YES or NO)

(5) // TYPE NET, PO, VND, EO, CP, CF, FPN, HOL, CMT, OR NO
(Type Network Number, Purchase Order, Vendor, Equipment Symbol, Purchase Cost, Final Cost, Floating Point Number, Hollerith, Comment)

?? (Type appropriate code or NO for a special report)
(If NO, (8) will appear; otherwise (6) will appear)

(6) // TYPE ALL, AA, AS, MER, OR SEL
(Type ALL, Actual Award, Scheduled Award, Milestone Exception Report, Selection)

?? (Type appropriate code)
(If SEL, (7) will appear; otherwise (5) will appear)

(7) // TYPE item (Where item is one of the following, depending on the response to query (5) - NETWORK NUMBER, VENDOR NAME, HOLLERITH, COMMENT

?? (Type appropriate selection) (Example: JOHN DOE CO.)

// MORE SELECTIONS TYPE, YES OR NO

?? (Type YES or NO)
(If YES, (7) will appear; otherwise (5) will appear)

(8) //BYE//

```
--LOCAL FILES--
 $OUTPUT   *ODB          $INPUT     *PROFIL     *X
  ESR       COPYODB       NDB        COPYNDB
      STOP
      17.155 CP SECONDS EXECUTION TIME
```

Definition of the Local File Names

(*Means the file name is a permanent file)
$OUTPUT - File name for computer to user interface
*ODB - Old data base
$INPUT - File name user to computer interface
*PROFIL - Begin/Revert computer control card file name
*X - Executable file name
ESR - File which contains all the requested reports
COPYODB - Printable version of old data base
NDB - New data base
COPYNDB - Printable version of new data base

One may save the new data base (NDB) as a permanent file as follows:

```
COMMAND- CATALOG,NDB,****,ID=YYY.
         (**** = Permanent File Used to store new Data
         Base)
```

One may obtain printing of a file as follows:

```
COMMAND- ROUTE,XXX,DC=PR,TID=WW,ST=ZZ.

         (XXX - File name (ESR, COPYODB, COPYNDB
         WW  - Terminal ID
               (For example)
               C (Central Site)
               or BZ (Building 171)
         ZZ  - Computer System
               66B (Bldg 171)
               66B or 65I (Central Site))

COMMAND- LOGOUT.

CPA        25.920 SEC.           25.920 ADJ.
CPB          .002 SEC.             .002 ADJ.
SYS TIME                         39.288
EST. COST AT $390/HR. - $         4.25
CONNECT TIME       0 HRS.        7 MIN.
                   LOGGED OUT AT 09.47.40
```

IV. DATA BASE CHANGES

Using the following procedures the Old Data Base (ODB) can be updated and modified forming a New Data Base (NDB):

1. CHANGE OR ADD DATES TO 3 X 5 DATE MATRIX
(See pages 6 and 7)

	A	B	C	D	E	
MATRIX	AS	BS	CS	DS	ES	/Schedule
	AA	BA	CA	DA	EA	/Actual
	AC	BC	CC	DC	EC	/Critical

Profile	A	B	C	D	E
0	Award	Delivery	Transfer	CSTRT	CFNSH
1	Rehab	Transfer	Instl Start	Instl Complete	Debug
2	Rehab	Instl Start	Instl Complete	Transfer	Debug
3	Award	Delivery	Instl Start	Instl Complete	Debug

a. Dates are entered, month, year in four digits. For example, given profile 3, to record items with an Actual installation start (Column C) date of July 76 enter the following:

?? CA0776 (places 0776 in Column 3, Row 2.

NOTE: All items regardless of profile with the same date change in the matrix can be changed at the same time.

To place a blank in matrix position Column 2, Row 2:

leave date out and type BS

b. The appropriate equipment number is then requested.

// TYPE EQUIPMENT NUMBERS

?? (User enters equipment numbers associated with this date change) There are two options:

(1) Programmed for a maximum of 20, each separated by only a comma (Ex. 101,009,...,222) (three digits for each equipment number are required).

(2) Consecutive equipment numbers (Ex. 101-150) (all equipment numbers between 101 and 150 must exist).

NOTE: Each equipment number entered will have placed in its respective matrix position the date specified in (1a).

2. CHANGE OR ADD NETWORK NUMBERS

The network number is used to group items by a common node number. This node number can correspond to a critical path diagram or anything the user desires. The network number is a five digit integer.

?? NN

// TYPE NETWORK NUMBER COMMA EQUIPMENT NUMBERS

?? (User enters network number comma and maximum of 12 equipment numbers each separated only by a comma) (Ex. 67890,101,260,090,...,120)

3. CHANGE OR ADD DATES TO 3 X 5 DATE MATRIX BY NETWORK NUMBER

When every item with the same network number has the same change to the date matrix, the data base can be changed most expeditiously by using the Network Numbers.

The user enters N the column letter and the row letter (see para 1).

As an example

?? NAS

// TYPE NETWORK NUMBER COMMA DATE

?? (user enters Network Number, comma, date) (Ex. 67890,0878)

4. CHANGE OR ADD PURCHASE ORDER

a. Purchase Orders are 5 digit integer numbers. To enter Purchase Order 12345, enter the following:

?? P,12345

b. // TYPE EQUIPMENT NUMBERS

?? (User enters equipment numbers associated with this Purchase Order maximum of 20 each separated by a comma) (Ex. 101,020,230,...,105).

5. CHANGE OR ADD PURCHASE ORDER BY NETWORK NUMBER

When every item with the same network number has the same change to the purchase order, the data base can be changed most expeditiously by using the Network Numbers.

The user enters NP.

As an example

?? NP

//TYPE NETWORK NUMBER COMMA PURCHASE ORDER

?? (user enters Network Number, comma, purchase order) (Ex. 67890,12345)

6. CHANGE OR ADD VENDOR NAME

a. Vendor names are a maximum of 15 characters. To enter the Vendor name FABRICATORS INC enter the following:

?? V,FABRICATORS INC

b. // TYPE EQUIPMENT NUMBERS

?? (User enters equipment numbers associated with this Vendor maximum of 20 each separated by a comma) (Ex. 251,003,128,500,...,109)

7. CHANGE OR ADD VENDOR NAME BY NETWORK NUMBER

When every item with the same network number has the same change to the vendor name, the data base can be changed most expeditiously by using the Network Numbers.

The user enters NV.

As an example

?? NV

// TYPE NETWORK NUMBER COMMA VENDOR

?? (user enters Network Number, comma, vendor)
(Ex. 67890,FABRICATORS INC)

8. CHANGE OR ADD COSTS

There are three different types of costs:

N - Negotiated Cost
P - Purchase Order Cost
F - Final Cost

There are two options in changing costs:

a. Option 1: For changing costs by individual component items.

?? INC (or IPC,IFC)

// TYPE EQUIPMENT NUMBER COMMA COST

?? (User enters equipment number, comma, cost with decimal point) (Ex. 101,6.532) (cost can be maximum of 7 digits)

b. Option 2: For changing costs of items with consecutive equipment numbers.

?? MNC (or MPC,MFC)

// START-FINISH

?? (User enters first equipment number, dash, last equipment number) (Ex. 101-142).

(First five equipment numbers selected are printed out)

101,102,103,104,105

?? COSTS= (enter costs for corresponding equipment numbers each with a decimal point separated by a comma) (Ex. 6.925, 170., 1001.024, 0.936, 7.5)

(The next five equipment numbers selected are printed out)

106,107,108,109,110

?? COSTS= (enter costs)

(This continues until all equipment numbers selected are printed out)

141,142

?? COSTS= (enter costs)

9. CHANGE OR ADD STORED OR TEMPORARY COMMENT

Comments are a maximum of thirty characters that may be used for clarification, explanations or anything the user wishes. They are either stored (placed on NDB and ESR files) or temporary (placed on ESR file only).

a. There are two options in changing stored comments:

(1) Changing stored comment for one individual component item.

?? SCI

// TYPE EQUIPMENT NUMBER COMMA COMMENT

?? (User enters equipment number, comma, comment up to 30 characters) (Ex. 121, SAMPLE COMMENT)

(2) Stored comment for many items

?? SCM

// TYPE COMMENT

?? (user enters comment up to 30 characters) (Ex. THIS IS ANOTHER SAMPLE!!)

// TYPE EQUIPMENT NUMBERS

?? (User enters equipment numbers maximum of 20 each separated only by a comma) (Ex.701,225,007,...,190)

b. There is only one option in entering a temporary comment.

?? TCM

// TYPE COMMENT

?? (User enters comment up to 30 characters)
(Example: TEMPORARY COMMENT NOT ON NDB)

// TYPE EQUIPMENT NUMBERS

?? (User enters equipment numbers maximum of 20 each, separated only by a comma) (Example: 005,120,...,101)

10. CHANGE OR ADD STORED COMMENT BY NETWORK NUMBER

When every item with the same network number has the same change to the stored comment, the data base can be changed most expeditiously by using the Network Numbers.

The user enters NSC.

As an example:

?? NSC

// TYPE NETWORK NUMBER COMMA COMMENT

?? (user enters Network Number, comma, comment) (Example: 67890, SAMPLE COMMENT)

11. CHANGE OR ADD HOLLERITH

Holleriths are a maximum of TEN characters that have similar uses to stored comments (para 9, page 20), but are placed in another location in NDB and ESR and can be separately sorted. This provides the users with additional space for comments.

?? H,(Comment is entered here)

// TYPE EQUIPMENT NUMBERS

?? (user enters equipment numbers associated with this Hollerith maximum of 20 each, separated by a comma) (Example: 101,...,170)

NOTE: If Hollerith is N/A, the item is listed in Equipment Status Report and Data Base for information purposes only. The item is not included in graphical display, the specifically requested reports, or in any percentages and calculations.

12. CHANGE OR ADD HOLLERITH BY NETWORK NUMBER

When every item with the same network number has the same change to the Hollerith, the data base can be changed most expeditiously by using the Network Numbers.

The user enters NH.

As an example:

?? NH

// TYPE NETWORK NUMBER COMMA HOLLERITH

?? (user enters Network Number, comma, Hollerith)
(Example: 67890,COMMENT)

13. CHANGE OR ADD FLOATING POINT NUMBER

Floating point numbers are a maximum of 7 digits with a decimal point that provides another location for storage of cost data or other floating point number data. This number can be sorted, but cannot be used in any calculations.

?? FPN

// TYPE EQUIPMENT NUMBER COMMA FLOATING POINT NUMBER

?? (user enters equipment number, comma, number with decimal point) (Example: 101,6.532) (Number can be maximum of 7 digits)

14. CHANGES COMPLETE

?? END (return to Section III, page 11)

Summary

To Be Changed	Enter
Comments Stored (Individual or Many)	SCI, SCM
Comments Temporary (Many)	TCM
Costs Individual (Negotiated, Purchase, or Final)	INC, IPC, IFC
Costs Many (N, P or F)	MNC, MPC, MFC
Dates (Column A, Schedule, Actual, or Critical)	AS, AA, AC and Date
Dates (Col B, S, A or C)	BS, BA, BC and Date
Dates (Col C, S, A or C)	CS, CA, CC and Date
Dates (Col D, S, A or C)	DS, DA, DC and Date
Dates (Col E, S, A or C)	ES, EA, EC and Date
Floating Point Number	FPN
Hollerith	H,(enter comment)
Network Number	NN
Network Number to Change Dates	NAS, NBA, etc.
Network Number to Change Hollerith	NH
Network Number to Change Purchase Order	NP
Network Number to Change Stored Comment	NSC
Network Number to Change Vendor	NV
Purchase Order	P,(enter number)
Vendor	V,(vendor name)
When no more changes are to be made	END

V. SAMPLE OF DATA BASE CHANGES

To assist in the understanding of the way ESP is used to change the data base, a sample data base of one item is shown.

Figure 2 Shows the data base prior to making the changes.
Figure 3 Shows the interactive responses changing the data base.
Figure 4 Shows the data base after the changes have been made.

A summary of the 11 changes to the data base with Profile 3 are as follows:

Change 1 Replaced the Purchase Order Number 1005 with 12345.
Change 2 Replaced the Vendor Name John Doe Inc. with Fabricators Inc.
Change 3 Replaced Hollerith ECP TCM005 with NEW OUTPUT.
Change 4 Replaced Scheduled Award Date 0178 with 0976.
Change 5 Replaced Actual Award Date 0678 with 1176.
Change 6 Added Actual Install Start Date 0776.
Change 7 Deleted Critical Delivery Date 1278.
Change 8 Replaced Network Number 0 with 67890.
Change 9 Replaced Floating Point Number 0.000 with 11.111.
Change 10 Replaced Negociated Cost 10.215 with 22.222.
Change 11 Added the Stored Comment Stored Comment Individual.

For further clarification, Figure 5 will show the date matrix and associated changes isolated.

Preceding Page Blan

```
    1     1
76
TEST CASE EQUIPMENT STATUS REPORT
(TEST ESR)
GOVERNMENT ARMY AMMO PLANT
PROJ 575ZZZZ TEST CASE PLANT
DRDAR-MS-MSM  I.TEVIOVITZ    DRDAR-SC-SCN  J.BEVELOCK   DRDAR-MS-MSM  B.BARNETT
DRCPM-PBM-EE  T.CAGGIANO     DRCPM-PBM-EE  R.GOLDBERG   DRCPM-PBM-EE  A.E.LOHR
ESR NOMENCLATURE
IDENTIFICATION      DATES     COMMENTS
NO-EQUIPMENT NUMBER AWARD-AWARD(SCHED/ACT/CRIT)   S CMT-STORED COMMENTS
EQ-EQUIPMENT SYMBOL DLVRY-DELIVERY(SCHED/ACT/CRIT)CP CMT-COMPUTER COMMENTS
DESC-EQUIPMENT DESCRIPTION    ISTRT-INSTALL START(SCHED/ACT/CRIT)
PO-PURCHASE ORDER   ICOMP-INSTALL COMPLETE(SCHED/ACT/CRIT)  FPNUM INSTALL COST
VNDR-VENDOR NAME    DEBUG-DEBUG COMPLETE(SCHED/ACT/CRIT)    NET-NETWORK NUMBER
CN/CP/CF-COSTS(NEGO/BUDGET/FINREHAB-REHAB COMPLETE(SCHED/ACT/CRIT)
TRNSF-TRANSFER(SCHED/ACT/CRIT)
WET GUANIDINE NITRATE SECTION             1① 100  3    ②           ③
101XA-207A          CARBONATE⑤TOWER      1005JOHN DOE INC. ⑦ECP TCM005
0178④0278 0378      0578 0678 0778   ⑥     1078 1178 1278 0179      0379 ⑪
    0⑧         0.000⑨  10.215⑩   0.000     0.000

••
```

FIGURE 2

Data Base Prior To
Making the Changes

```
   COMMAND- ETL,60

   COMMAND- BEGIN,ESP,/TEVIOVITZ

   // OLD DATA BASE (ODB) IS NOW BEING READ
   // READY FOR USER'S CHANGES TO DATA BASE
①  ??P,12345

   // TYPE EQUIPMENT NUMBERS
   ??101

②  ??V,FABRICATORS INC

   // TYPE EQUIPMENT NUMBERS
   ??101

③  ??H,NEW OUTPUT

   // TYPE EQUIPMENT NUMBERS
   ??101

④  ??AS0976

   // TYPE EQUIPMENT NUMBERS
   ??101

⑤  ??AA1176

   // TYPE EQUIPMENT NUMBERS
   ??101
```

FIGURE 3

Interactive Responses Which
Change the Data Base

```
⑥ ??CA0776

  // TYPE EQUIPMENT NUMBERS
  ??101

⑦ ??BC

  // TYPE EQUIPMENT NUMBERS
  ??101

⑧ ??NN

  //  TYPE NETWORK NUMBER COMMA EQUIPMENT NUMBERS
  ??67890,101

⑨ ??FPN

  // TYPE EQUIPMENT NUMBER COMMA FLOATING POINT NUMBER
  ??101,11.111

⑩ ??INC

  //  TYPE EQUIPMENT NUMBER COMMA COST
  ??101,22.222

⑪ ??SCI

  //  TYPE EQUIPMENT NUMBER COMMA COMMENT
  ??101,STORED COMMENT INDIVIDUAL

  ??END
```

FIGURE 3 (Continued)

```
    1    1
76
TEST CASE EQUIPMENT STATUS REPORT
(TEST ESR)
GOVERNMENT ARMY AMMO PLANT
PROJ 575ZZZZ TEST CASE PLANT
DRDAR-MS-MSM  I.TEVIOVITZ    DRDAR-SC-SCN  J.BEVELOCK   DRDAR-MS-MSM  B.BARNETT
DRCPM-PBM-EE  T.CAGGIANO     DRCPM-PBM-EE  R.GOLDBERG   DRCPM-PBM-EE  A.E.LOHR
ESR NOMENCLATURE
IDENTIFICATION      DATES     COMMENTS
NO-EQUIPMENT NUMBER AWARD-AWARD(SCHED/ACT/CRIT)   S CMT-STORED COMMENTS
EQ-EQUIPMENT SYMBOL DLVRY-DELIVERY(SCHED/ACT/CRIT)CP CMT-COMPUTER COMMENTS
DESC-EQUIPMENT DESCRIPTION    ISTRT-INSTALL START(SCHED/ACT/CRIT)
PO-PURCHASE ORDER   ICOMP-INSTALL COMPLETE(SCHED/ACT/CRIT)  FPNUM INSTALL COST
VNDR-VENDOR NAME    DEBUG-DEBUG COMPLETE(SCHED/ACT/CRIT)    NET-NETWORK NUMBER
CN/CP/CF-COSTS(NEGO/BUDGET/FINREHAB-REHAB COMPLETE(SCHED/ACT/CRIT)
TRNSF-TRANSFER(SCHED/ACT/CRIT)
WET GUANIDINE NITRATE SECTION               1① 100  3       ②         ③
101XA-207A          CARBONATE⑤TOWER     ⑥12345FABRICATORS INCNEW OUTPUT
0976④0278 0378      0578 1176 0778 0776      1078 1178    ⑦0179         0379
67890⑧        11.111⑨   22.222⑩    0.000      0.000STORED COMMENT INDIVIDUAL⑪
```

FIGURE 4

Data Base After Changes
Have Been Made

BEFORE

```
           A         B        C       D       E
          -------------------------------------------------
          0178 4    0278     0378                0578/Schedule
Equipment 0678 5    0778          6              1078/Actual
  101     1178      1278 7   0179                0379/Critical
```

```
4    ??AS0976

     // TYPE EQUIPMENT NUMBERS

     ??101

5    ??AA1176

     // TYPE EQUIPMENT NUMBERS

     ??101

6    ??CA0776

     // TYPE EQUIPMENT NUMBERS

     ??101

7    ??BC

     // TYPE EQUIPMENT NUMBERS

     ??101

     ??END
```

AFTER

```
           A         B        C       D       E
          -------------------------------------------------
          0976 4    0278     0378                0578/Schedule
Equipment 1176 5    0778     0776 6              1078/Actual
  101     1178           7   0179                0379/Critical
```

FIGURE 5

Isolated Date Matrix

APPENDIX A

DATA BASE

DATA BASE

A card by card description of the data base follows:

Card No.	Column No.	Explanation	Example
1	5	Number of Entities	Process Areas (Max,9)
1	8-10	Number of Total Items	Equipment (Max,335)
2	1-2	Base Year (Initial Year)	77
3	1-80	Heading	Report Name
4	1-80	Heading	Abbreviated Report
5	1-80	Heading	Plant
6	1-80	Heading	Project Number/Title
7	1-80	Heading	Report Recipients
8	1-80	Heading	Report Recipients
9	1-20	Heading	ESR Nomenclature
10	1-20	Heading	Identification
10	21-30	Heading	Dates
10	31-40	Heading	Comments
11	1-20	Heading	NO - EQUIPMENT NUMBER
11	21-50	Heading	AWARD - AWARD (SCHED/ACT/CRIT)
11	51-80	Heading	S CMT - STORED COMMENTS
12	1-20	Heading	EQ - EQUIPMENT SYMBOL
12	21-50	Heading	DLVRY - DELIVERY (SCHED/ACT/CRIT)
12	51-80	Heading	CP CMT - COMPUTER COMMENTS
13	1-30	Heading	DESC - EQUIPMENT DESCRIPTION
13	31-70	Heading	ISTRT - INSTALL START (SCHED/ACT/CRIT)
13	71-80	Heading	BLANK
14	1-20	Heading	PO - PURCHASE ORDER
14	21-60	Heading	ICOMP - INSTALL COMPLETE (SCHED/ACT/CRIT)
14	61-80	Heading	FPNUM - INSTALL COST

Card No.	Column No.	Explanation	Example
15	1-20	Heading	VNDR - VENDOR NAME
15	21-60	Heading	DEBUG - DEBUG COMPLETE (SCHED/ACT/CRIT)
15	61-80	Heading	NET - NETWORK NODE
16	1-30	Heading	CN/CP/CF - COSTS (NEGO/BUDGET/FIN)
16	31-70	Heading	REHAB - REHAB COMPLETE (SCHED/ACT/CRIT)
16	71-80	Heading	BLANK
17	1-40	Heading	TRNSF - TRANSFER (SCHED/ACT/CRIT)
18	1-40	Entity Name	Process Area
18	43-45	Last Record Number in Building	25
18	48-50	Series (100, 200, etc)	200
18	53	Profiles selected (Milestone Columns, see Section II)	0,1,2 or 3

Card 18 is repeated for each process area. The user may change the Profile (Column 55) for each process area.

			Abbr Used on Repts
19	1-3	Equipment Number	NO.
NOTE:	IF MORE THAN ONE PROFILE IS SELECTED FIRST SERIES MUST BE 100 AND NOT 000 AND FIRST EQUIPMENT NUMBER MUST BE 101		
19	4-13	Equipment Symbol	EQ
19	21-40	Equipment Description	DESCRP
* 19	41-45	Purchase Order	PO
19	46-60	Vendor Name	VNDR
* 19	61-70	Hollerith	HOL
NOTE:	IF HOLLERITH IS N/A, THE ITEM IS LISTED IN EQUIPMENT STATUS REPORT AND DATA BASE FOR INFORMATION PURPOSES ONLY. THE ITEM IS NOT INCLUDED IN GRAPHICAL DISPLAY, THE SPECIFICALLY REQUESTED REPORTS OR IN ANY PERCENTAGES AND CALCULATIONS.		

* 20 1-74 Date Matrix

All dates separated by a comma (Example: 0478,0579). Dates are in the following order

The five Scheduled dates are in Cols 1-25 (AS,BS,CS,DS,ES,).
The five Actual dates are in Cols 26-50 (AA,BA,CA,DA,EA,).
The five Critical dates are in Cols 51-74 (AC,BC,CC,DC,EC,).

CARD NO.	COLUMN NO.	EXPLANATION	ABBR USED ON REPTS
* 21	1-5	Network Number	NET
* 21	11-20	Floating Point Number	FPNUM
* 21	21-30	Negotiated Cost (Floating Point)	CN
* 21	31-40	Purchase Order Cost (Floating Point)	CP
* 21	41-50	Final Cost (Floating Point)	CF
* 21	51-80	Stored Comment	CMT

* Items that may be added or changed by ESP (the other items can be changed in Editor).

Cards 19-21 are repeated for every item.

An illustration of a data base is on pages 35-36. This data base is typically created with cards for batch mode operation.

```
    2   25
77
TEST CASE EQUIPMENT STATUS REPORT
(TEST ESR)
GOVERNMENT ARMY AMMO PLANT
PROJ 5752ZZZ TEST CASE PLANT
DRDAR-MS-MSM  I.TEVIOVITZ    DRDAR-SC-SCN  J.BEVELOCK   DRDAR-MS-MSM  B.BARNETT
DRCPM-PBM-EE  T.CAGGIANO     DRCPM-PBM-EE  R.GOLDBERG   DRCPM-PBM-EE  A.E.LOHR
ESR NOMENCLATURE
IDENTIFICATION      DATES     COMMENTS
NO-EQUIPMENT NUMBER AWARD-AWARD(SCHED/ACT/CRIT)   S CMT-STORED COMMENTS
EQ-EQUIPMENT SYMBOL DLVRY-DELIVERY(SCHED/ACT/CRIT)CP CMT-COMPUTER COMMENTS
DESC-EQUIPMENT DESCRIPTION    ISTRT-INSTALL START(SCHED/ACT/CRIT)
PO-PURCHASE ORDER   ICOMP-INSTALL COMPLETE(SCHED/ACT/CRIT)  FPNUM INSTALL COST
VNDR-VENDOR NAME    DEBUG-DEBUG COMPLETE(SCHED/ACT/CRIT)    NET-NETWORK NUMBER
CN/CP/CF-COSTS(NEGO/BUDGET/FINREHAB-REHAB COMPLETE(SCHED/ACT/CRIT)
TRNSF-TRANSFER(SCHED/ACT/CRIT)
WET GUANIDINE NITRATE SECTION              15  100  3
GENERAL SECTION                            25  200  2
101XA-207A          CARBONATE TOWER      1005JOHN DOE INC.  ECP TCM005
0278 0778 0279 0279      0278                                    0579
    0      10.215    17.067    17.067     0.000
102XA-214           WEAK ABSORBER        1032JOHN DOE INC.
0378 0778 0479 0479      1177 0478 0578                          0579
12345      18.327    20.305    20.305    20.690
103XA-215           STRONG ABSORBER      1032MANUFACTURER   ECP TCP002
0378 0778 0479 0479      0278                                    0579
12345       9.428    13.520    13.520     0.000
104XA-230-3         SULFUR STRIPPER      1032JOHN DOE INC.  ECP TCP002
0378 0778 0579 0579      0278                                    0579
    0       7.396    10.410    10.410     0.000
105XC-208           AIR BLOWER           1045MANUFACTURER   ECP TCM005
0478 0778 0579 0579 0679 0378                                    0579
    0       0.000     2.114     2.114     0.000
106XC-218-9         SEC FILT VACUUM PUMP    0
0678 0279 0379 0379 0679                                         0579
    0       0.000     6.921     0.000     0.000
107XC-219-9         PRIM FILT VACUM PMP     0
0278 0279 0379 0379 0679                                         0579
    0       0.000     6.805     0.000     0.000
108XC-219-11        FILTR TNK CO2 INJECT 1010MANUFACTURER   ECP TCM005
0478 1278 0379 0379 0679 1277 0478                               0579
    0       0.000     1.750     1.750     1.750INSTALL DELAY DUE TO SNOW
109XC-226-3         FILTRATE EXHAUST FAN 1035ABC COMPANY
0478 0778 0579 0579 0679 0378                                    0579
    0       0.000     3.577     3.577     0.000
110XC-229-2         NEUT EXHAUST FAN     1035ABC COMPANY
0478 0778 0479 0479 0679 0378                                    0579
    0       0.000     2.007     2.007     0.000
111XC-233-6         EVAP VACUUM SYS         0
0378 0479 0479 0579 0679                                         0579
    0       0.000    21.625     0.000     0.000
112XC-236-4         VACUUM EJECT SYS        0
0278 0479 0479 0579 0679                                         0579
    0       0.000     9.215     0.000     0.000
113XE-207-3         CARBONATE LIQ COOLER 1006ABC COMPANY
0278 0778 1278 1278 0679 1277                                    0179
55555       0.000     7.280     7.280     0.000
114XE-207-9         CARBONATE LIQ COOLER 1006ABC COMPANY
0278 0778 1278 1278 0679 0278                                    0179
55555       0.000     7.280     7.280     0.000
```

```
115XE-214-3         WEAK AQUA COOLER     1006ABC COMPANY
0278 0778 1278 1278      1277                                    0179
55555          0.000     3.400     3.400     0.000
201XJ-514           REFRIGERATION SYSTEM 1111FIX IT UP      ECP TCP002
0378 0279 0279 0379 0679 0478 0478                               0679
55555          0.000     1.215     1.213     1.213INSTALL DELAY DUE TO SNOW
202XP-514-2A-       CHILLED WATER PUMPS     0
0378 0379 0279 0379 0679                                         0679
55555          0.000      .908     0.000     0.000
203XT-514-3         CHILL WATER EXP TANK 1111REPAIRS INC    ECP TCP002
0378 0379 0379 0379      0478                                    0679
55555          0.000     1.516     1.704     1.704
204XD-601           COOLING TOWER        1000REPAIRS INC
0478           0479 0679 1277                                    0679
55555          6.721     9.907     9.873     9.873FIELD CONSTRUCTED
205XK-602           AIR COMPRESSOR       1000FIX IT UP      ECP TCM005
0478 1078 1078 1078 0479 0178 0278                               0179
    0          0.000      .321      .305      .305INSTALL DELAY DUE TO SNOW
206XA-603           AIR DRYER               0
0578 1178 1178 1178                                              0179
    0          0.000     2.421     0.000     0.000
207XP-601-2A-       COOLING TOWER PUMPS  1000REPAIRS INC
0478           0479 0679 0178                                    0679
55555          0.000      .871      .869      .869FIELD CONSTRUCTED
208XS-601-3         SAND FILTER             0

    0          0.000      .191     0.000     0.000ITEM TO BE DELETED FROM SOW
209XT-602-2         AIR RECEIVER         1050IN HOUSE
0578 1178 1278 1278      1177 1277 0578                          0179
    0          0.000      .325      .325      .325
210XE-701-4         AMM NITRATE HEATER   1050IN HOUSE       ECP TCM005
                         1177 1277                               0179
    0          0.000      .690      .691      .691INSTALL DELAY DUE TO SNOW
```

APPENDIX B

EQUIPMENT STATUS REPORT (ESR)

EQUIPMENT STATUS REPORT (ESR)

The information on the first page of ESR is from Data Base Lines 3-18. The second and subsequent pages are as follows:

Line No.	Column No.	Explanation
1-3	1-80	Line Nos. 6-8 from Data Base
4	54-94	Process Area (From Line 18, column 1-40 on Data Base)
5	1-120	Heading for ESR
6	2-4	Equipment Number
6	6-15	Equipment Symbol
6	27-36	Negotiated Cost
6	38-68	Scheduled Dates
6	69-109	Stored Comment (or Temporary Comment)
7	6-25	Equipment Descriptions
7	27-35	Purchase Order Cost
7	38-68	Actual Dates
7	69-109	Computer Generated Comment
8	6-10	Purchase Order
8	11-25	Vendor Name
8	27-36	Final Cost
8	38-68	Critical Dates
8	69-73	Network Number
8	78-87	Floating Point Number
8	88-97	Hollerith
9	Blank	Skip Line

Line Nos. 6-9 repeated 13 per page.
Line Nos. 4-9 repeated until every item in process area is printed.
Line Nos. 1-9 repeated until every item is printed.

Computer Generated Comments in ESR

The comment generated depends on the profile selected (line no. 18, col 55 of Data Base). See Section II for Dates Matrix entries (AA,BS,...) and Profiles.

Situation	Profile	Comment
AA is blank (has no date)	0,3	ITEM NOT AWARDED
	1,2	REHAB NOT COMPLETE
AA has a date and BA is blank	0,3	No comment generated
	1	REHAB COMPLETE, AWAIT CE TRANSFER
	2	REHAB COMPLETE, AWAIT INSTALL
AA,BA have dates on CA is blank	0	ON SITE, AWAIT CE TRANSFER
	1	AAP TRANSFER TO CE COMPLETE
	2	INSTALLATION STARTED
	3	ON SITE, AWAIT INSTALLATION
AA,BA,CA have dates and DA is blank	0	AAP TRANSFER TO BE COMPLETE
	1,3	INSTALLATION STARTED
	2	INSTALLATION COMPLETE, AWAIT CE TRANSFER
AA,BA,CA,DA have dates and EA is blank	0,2	AAP TRANSFER TO CE COMPLETE
	1,3	INSTALLATION COMPLETE
AA,BA,CA,DA,EA have dates	0	AAP TRANSFER TO CE COMPLETE
	1,2,3	DEBUG COMPLETE

```
                                 TEST CASE EQUIPMENT STATUS REPORT
                                              (TEST ESR)


                                        DATE   06/02/78
                              PROJ 575ZZZZ TEST CASE PLANT

                                         GOVERNMENT ARMY AMMO PLANT

   DRDAR-MS-MSM  I.TEVIOVITZ    DRDAR-SC-SCN  J.BEVELOCK    DRDAR-MS-MSM  B.BARNETT
   DRCPM-PBM-EE  T.CAGGIANO     DRCPM-PBM-EE  R.GOLDBERG    DRCPM-PBM-EE  A.E.LOHR


                                          ESR NOMENCLATURE
  IDENTIFICATION                     DATES                                        COMMENTS
  .................                  .........                                   .........
  NO-EQUIPMENT NUMBER                AWARD-AWARD(SCHED/ACT/CRIT)                  S CMT-STORED COMMENTS
  EQ-EQUIPMENT SYMBOL                DLVRY-DELIVERY(SCHED/ACT/CRIT)               CP CMT-COMPUTER COMMENTS
  DESC-EQUIPMENT DESCRIPTION         ISTRT-INSTALL START(SCHED/ACT/CRIT)
  PO-PURCHASE ORDER                  ICOMP-INSTALL COMPLETE(SCHED/ACT/CRIT)       FPNUM INSTALL COST
  VNDR-VENDOR NAME                   DEBUG-DEBUG COMPLETE(SCHED/ACT/CRIT)         NET-NETWORK NUMBER
  CN/CP/CF-COSTS(NEGO/BUDGET/FIN     REHAB-REHAB COMPLETE(SCHED/ACT/CRIT)
                                     TRNSF-TRANSFER(SCHED/ACT/CRIT)


  BUILDING NAME                      LAST RECORD NO.     SERIES
  WET GUANIDINE NITRATE SECTION                   15        100
  GENERAL SECTION                                 25        200
```

```
                                           PROJ 575ZZZZ TEST CASE PLANT
          DRDAR-MS-MSM  I.TEVIOVITZ     DRDAR-SC-SCN  J.BEVELOCK    DRDAR-MS-MSM  B.BARNETT
          DRCPM-PBM-EE  T.CAGGIANO      DRCPM-PBM-EE  R.GOLDBERG    DRCPM-PBM-EE  A.E.LOHR
                                                      WET GUANIDINE NITRATE SECTION
NO. EQ/DESCRP/PO VNDR     CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

101*XA-207A            *    17.067* 0278* 0778* 0279* 0279*      *
   *CARBONATE TOWER    *    17.067* 0278*     *     *     *      *
   * 1005JOHN DOE INC. *     0.000*     *     *     * 0579*      *   0         10.215ECP TCM005

102*XA-214             *    20.305* 0378* 0778* 0479* 0479*      *
   *WEAK ABSORBER      *    20.305* 1177* 0478* 0578*     *      *INSTALLATION STARTED
   * 1032JOHN DOE INC. *    20.690*     *     *     * 0579*      *12345        18.327

103*XA-215             *    13.520* 0378* 0778* 0479* 0479*      *
   *STRONG ABSORBER    *    13.520* 0278*     *     *     *      *
   * 1032MANUFACTURER  *     0.000*     *     *     * 0579*      *12345         9.428ECP TCP002

104*XA-230-3           *    10.410* 0378* 0778* 0579* 0579*      *
   *SULFUR STRIPPER    *    10.410* 0278*     *     *     *      *
   * 1032JOHN DOE INC. *     0.000*     *     *     * 0579*      *   0          7.396ECP TCP002

105*XC-208             *     2.114* 0478* 0778* 0579* 0579* 0679*
   *AIR BLOWER         *     2.114* 0378*     *     *     *      *
   * 1045MANUFACTURER  *     0.000*     *     *     * 0579*      *   0          0.000ECP TCM005

106*XC-218-9           *     6.921* 0678* 0279* 0379* 0379* 0679*
   *SEC FILT VACUUM PUMP*    0.000*     *     *     *     *      * ITEM NOT AWARDED
   *    0              *     0.000*     *     *     * 0579*      *   0          0.000

107*XC-219-9           *     6.805* 0278* 0279* 0379* 0379* 0679*
   *PRIM FILT VACUM PMP *    0.000*     *     *     *     *      * ITEM NOT AWARDED
   *    0              *     0.000*     *     *     * 0579*      *   0          0.000

108*XC-219-11          *     1.750* 0478* 1278* 0379* 0379* 0679*INSTALL DELAY DUE TO SNOW
   *FILTR TNK CO2 INJECT*    1.750* 1277* 0478*     *     *      *ON SITE AWAIT INSTALLATION
   * 1010MANUFACTURER  *     1.750*     *     *     * 0579*      *   0          0.000ECP TCM005

109*XC-226-3           *     3.577* 0478* 0778* 0579* 0579* 0679*
   *FILTRATE EXHAUST FAN*    3.577* 0378*     *     *     *      *
   * 1035ABC COMPANY   *     0.000*     *     *     * 0579*      *   0          0.000

110*XC-229-2           *     2.007* 0478* 0778* 0479* 0479* 0679*
   *NEUT EXHAUST FAN   *     2.007* 0378*     *     *     *      *
   * 1035ABC COMPANY   *     0.000*     *     *     * 0579*      *   0          0.000

111*XC-233-6           *    21.625* 0378* 0479* 0479* 0579* 0679*
   *EVAP VACUUM SYS    *     0.000*     *     *     *     *      * ITEM NOT AWARDED
   *    0              *     0.000*     *     *     * 0579*      *   0          0.000

112*XC-236-4           *     9.215* 0278* 0479* 0479* 0579* 0679*
   *VACUUM EJECT SYS   *     0.000*     *     *     *     *      * ITEM NOT AWARDED
   *    0              *     0.000*     *     *     * 0579*      *   0          0.000

113*XE-207-3           *     7.280* 0278* 0778* 1278* 1278* 0679*
   *CARBONATE LIQ COOLER*    7.280* 1277*     *     *     *      *
   * 1006ABC COMPANY   *     0.000*     *     *     * 0179*      *55555         0.000
```

```
                                                    WET GUANIDINE NITRATE SECTION
 NO. EQ/DESCRP/PO VNDR    CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM HOL  DATE  06/02/78

114*XE-207-9            *     7.280* 0278* 0778* 1278* 1278* 0679*
   *CARBONATE LIQ COOLER*     7.280* 0278*     *     *     *     *
   * 1006ABC COMPANY    *     0.000*     *     *     * 0179*     *55555        0.000

115*XE-214-3            *     3.400* 0278* 0778* 1278* 1278*     *
   *WEAK AQUA COOLER    *     3.400* 1277*     *     *     *     *
   * 1006ABC COMPANY    *     0.000*     *     *     * 0179*     *55555        0.000
```

```
                                          PROJ 575ZZZZ TEST CASE PLANT
         DRDAR-MS-MSM  I.TEVIOVITZ    DRDAR-SC-SCN  J.BEVELOCK   DRDAR-MS-MSM  B.BARNETT
         DRCPM-PBM-EE  T.CAGGIANO     DRCPM-PBM-EE  R.GOLDBERG   DRCPM-PBM-EE  A.E.LOHR
                                                    GENERAL SECTION
 NO. EQ/DESCRP/PO VNDR    CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

201*XJ-514              *     1.215* 0378* 0279* 0279* 0379* 0679*INSTALL DELAY DUE TO SNOW
   *REFRIGERATION SYSTEM*     1.213* 0478* 0478*     *     *     *INSTALLATION STARTED
   * 1111FIX IT UP      *     1.213*     *     *     * 0679*     *55555          0.000ECP TCP002

202*XP-514-2A-          *      .908* 0378* 0379* 0279* 0379* 0679*
   *CHILLED WATER PUMPS *     0.000*     *     *     *     *     *REHAB NOT COMPLETE
   *    0               *     0.000*     *     *     * 0679*     *55555          0.000

203*XT-514-3            *     1.516* 0378* 0379* 0379* 0379*     *
   *CHILL WATER EXP TANK*     1.704* 0478*     *     *     *     *REHAB COMPLETE AWAIT INSTALL
   * 1111REPAIRS INC    *     1.704*     *     *     * 0679*     *55555          0.000ECP TCP002

204*XD-601              *     9.907* 0478*     *     * 0479* 0679*FIELD CONSTRUCTED
   *COOLING TOWER       *     9.873* 1277*     *     *     *     *REHAB COMPLETE AWAIT INSTALL
   * 1000REPAIRS INC    *     9.873*     *     *     * 0679*     *55555          6.721

205*XK-602              *      .321* 0478* 1078* 1078* 1078* 0479*INSTALL DELAY DUE TO SNOW
   *AIR COMPRESSOR      *      .305* 0178* 0278*     *     *     *INSTALLATION STARTED
   * 1000FIX IT UP      *      .305*     *     *     * 0179*     *    0          0.000ECP TCM005

206*XA-603              *     2.421* 0578* 1178* 1178* 1178*     *
   *AIR DRYER           *     0.000*     *     *     *     *     *REHAB NOT COMPLETE
   *    0               *     0.000*     *     *     * 0179*     *    0          0.000

207*XP-601-2A-          *      .871* 0478*     *     * 0479* 0679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS *      .869* 0178*     *     *     *     *REHAB COMPLETE AWAIT INSTALL
   * 1000REPAIRS INC    *      .869*     *     *     * 0679*     *55555          0.000

208*XS-601-3            *      .191*     *     *     *     *     *ITEM TO BE DELETED FROM SOW
   *SAND FILTER         *     0.000*     *     *     *     *     *REHAB NOT COMPLETE
   *    0               *     0.000*     *     *     *     *     *    0          0.000

209*XT-602-2            *      .325* 0578* 1178* 1278* 1278*     *
   *AIR RECEIVER        *      .325* 1177* 1277* 0578*     *     *INSTALL COMP,AWAIT CE TRANSFER
   * 1050IN HOUSE       *      .325*     *     *     * 0179*     *    0          0.000

210*XE-701-4            *      .690*     *     *     *     *     *INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER  *      .691* 1177* 1277*     *     *     *INSTALLATION STARTED
   * 1050IN HOUSE       *      .691*     *     *     * 0179*     *    0          0.000ECP TCM005
```

APPENDIX C

GRAPHICAL DISPLAY

GRAPHICAL DISPLAY

Line No.	Column	Explanation
1		Process Area (From Line 18, Column 1-40 in Data Base)
2		Heading for Graphical Display
3		One Letter Symbol for Months
4		Two Number Symbol for Months
5		Blank
6	1-3	Equipment Number
6	5-24	Equipment Description
6	28-124	Characters are placed in the appropriate months in the graphical display.
6	125-134	Computer generated comments

Line 6 repeated 50 per page.
Lines 1-6 repeated until every item is printed.

Characters Used in Graphical Display

				Profile No./Explanation			
Schedule	Actual	Critical		0	1	2	3
A	1	V	/	Award	Rehab	Rehab	Award
B	2	W	/	Deliv	Trans	Instl Start	Deliv
C	3	X	/	Trans	Instl Start	Instl Comp	Instl Start
D	4	Y	/	CSTRT	Instl Comp	Trans	Instl Comp
E	5	Z	/	CFNSH	Debug	Debug	Debug

Computer Generated Comments in Graphical Display

Situation	Profile	Comment
AA is blank	0,3	NO AWARD
	1,2	NO REHAB

Situation	Profile	Comment
AA has date and BA is blank	0,1,2,3	C:a D:b Where a is the time between B and C Where b is the time between B and D

Note: A period will appear as a separator ":" except when the time difference is less than six months an "=" appears. If less than three months, a "**" also appears in the right margin.

Situation	Profile	Comment
AA,BA have dates and CA is blank	0,3	ON SITE
	1	CE TRANS
	2	INST STRT
AA,BA,CA have dates and DA is blank	0	COMPLETE
	1,3	INST STRT
	2	INST COMP
AA,BA,CA,DA have dates and EA is blank	0	COMPLETE
	1,3	INST COMP
	2	CE TRANS
AA,BA,CA,DA and EA have dates	0,1,2,3	COMPLETE

If scheduled dates are not in correct sequence, the following comments are generated:

			Meaning
DS Less than CS	0	CRITLTTRAN	Critical Date is less than transfer date
	1,3	ICMPLTISTR	Installation Complete Date less than installation start date
	2	TRANLTICMP	Transfer Date is less than Installation complete date

Situation	Profile	Comment	
DS Less than BS	0	CRITLTDELV	Critical Date is less than delivery date
	1	ICOMLTTRAN	Installation Complete Date is less than transfer date
	2	TRANLTISTR	Transfer Date is less than installation start Date
	3	ICOMLTDELV	Installation Complete Date is less than Delivery Date
CS Less than BS	0	TRANLTDELV	Transfer Date is less than Delivery Date
	1	ISTRLTTRAN	Installation Start is less than transfer Date
	2	ICOMLTISTR	Installation Complete Date is less than installation start date
	3	ISTRLTDELV	Installation Start is less than Delivery Date

```
                                                   WET GUANIDINE NITRATE SECTION
NO. DESCRIPTION               1977                    1978                    1979                    1980          1981      COMMENT
                           J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M  06/02/78
                           060708091011120102030405060708091011120102030405060708091011120102030405060708091011120102030405

101 CARBONATE TOWER         .     +     .  1  +     .B*************D  +   Y .     +     .     +     .     +     .     +    C. 7 D. 7
102 WEAK ABSORBER           .     +  1  .     +2 3  .     +     .     +D  Y .     +     .     +     .     +     .     +    INST STRT
103 STRONG ABSORBER         .     +     .  1  +     .B*****************D  Y .     +     .     +     .     +     .     +    C. 9 D. 9
104 SULFUR STRIPPER         .     +     .  1  +     .B*******************DY .     +     .     +     .     +     .     +    C.10 D.10
105 AIR BLOWER              .     +     .    1+     .B*******************DYE.     +     .     +     .     +     .     +    C.10 D.10
106 SEC FILT VACUUM PUMP    .     +     .     +    A.     +     .  B*D+   YE.     +     .     +     .     +     .     +    NO AWARD
107 PRIM FILT VACUM PMP     .     +     .  A  +     .     +     .  B*D+   YE.     +     .     +     .     +     .     +    NO AWARD
108 FILTR TNK CO2 INJECT    .     +    1.     +2    .     +     .    D+   YE.     +     .     +     .     +     .     +    ON SITE
109 FILTRATE EXHAUST FAN    .     +     .    1+     .B*******************DYE.     +     .     +     .     +     .     +    C.10 D.10
110 NEUT EXHAUST FAN        .     +     .    1+     .B*****************D  YE.     +     .     +     .     +     .     +    C. 9 D. 9
111 EVAP VACUUM SYS         .     +     .    A+     .     +     .     +C DYE.     +     .     +     .     +     .     +    NO AWARD
112 VACUUM EJECT SYS        .     +     .  A  +     .     +     .     +C DYE.     +     .     +     .     +     .     +    NO AWARD
113 CARBONATE LIQ COOLER    .     +    1.     +     .B*********D. Y   +    E.     +     .     +     .     +     .     +    C= 5 D= 5
114 CARBONATE LIQ COOLER    .     +     .  1  +     .B*********D. Y   +    E.     +     .     +     .     +     .     +    C= 5 D= 5
115 WEAK AQUA COOLER        .     +    1.     +     .B*********D. Y   +     .     +     .     +     .     +     .     +    C= 5 D= 5
```

```
NO. DESCRIPTION                                      GENERAL SECTION
                                1977                    1978                    1979                    1980          1981    COMMENT
                            J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M  06/02/78
                            060708091011120102030405060708091011120102030405060708091011120102030405060708091011120102030405

201 REFRIGFRATION SYSTEM     .     +     .     +2    .     +     .  C D+    EY     +     .     +     .     +     .     +     INST STRT
202 CHILLED WATER PUMPS      .     +     .    A+     .     +     .  C D+    EY     +     .     +     .     +     .     +     ICOMLTIST
203 CHILL WATER EXP TANK     .     +     .     +1    .     +     .    D+     Y     +     .     +     .     +     .     +     C= 0 D= 0
204 COOLING TOWER            .     +    1.     +     .     +     .     +D   EY     +     .     +     .     +     .     +     TRANLTICM
205 AIR COMPRESSOR           .     +     .1 2  +     .     +D    . Y   +E    .     +     .     +     .     +     .     +     INST STRT
206 AIR DRYER                .     +     .     +  A  .     +  D  . Y   +     .     +     .     +     .     +     .     +     NO REHAB
207 COOLING TOWER PUMPS      .     +     .1    +     .     +     .     +D   EY     +     .     +     .     +     .     +     TRANLTICM
208 SAND FILTER              .     +     .     +     .     +     .     +     .     +     .     +     .     +     .     +     NO REHAB
209 AIR RECEIVER             .     +  1 2.     +  3  .     +    D. Y   +     .     +     .     +     .     +     .     +     INST COMP
210 AMM NITRATE HEATER       .     +  1 2.     +     .     +     . Y   +     .     +     .     +     .     +     .     +     INST STRT
```

APPENDIX D
SORTED DATES REPORTS (SDR)

Sorted Dates Reports (SDR)

For the SDR Format, line 1 is the same as line 1 of the ESR. Line 2 is blank. Line 3 is the title which is:

+++ ZZ SORTED DATES REPORTS +++

Where ZZ is the specific report selected (i.e. SCHEDULED DELIVERY, ACTUAL INST START, CRITICAL DEBUG) (when there is more than one profile number in the data base the two letter symbol is used (i.e. SCHEDULED BS, ACTUAL CA, CRITICAL EC).

ESR Format. Line 4 is blank. The rest of SDR format follows. The items are listed in order of dates and grouped by profile number. If a Schedule or Critical listing is selected items with an actual date are not included in the listing.

The computer generated comments are the same as the Milestone Exception Report (see Appendix E).

```
                                   PROJ 575ZZZZ TEST CASE PLANT

                          +++ ACTUAL     AA           SORTED DATES REPORT +++

NO. EQ/DESCRP/PO VNDR    CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

102*XA-214              *   20.305*  378*  778*  479*  479*  0 0*
   *WEAK ABSORBER       *   20.305* 1177*  478*  578*  0 0*  0 0*CRIT SCHEDINSTALL COMPLETE
   * 1032JOHN DOE INC.  *   20.690*  0 0*  0 0*  0 0*  579*  0 0*12345          18.327

108*XC-219-11           *    1.750*  478* 1278*  379*  379*  679*INSTALL DELAY DUE TO SNOW
   *FILTR TNK CO2 INJECT*    1.750* 1277*  478*  0 0*  0 0*  0 0*
   * 1010MANUFACTURER   *    1.750*  0 0*  0 0*  0 0*  579*  0 0*    0             0.000ECP TCM005

113*XE-207-3            *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*    7.280* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY    *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555           0.000

115*XE-214-3            *    3.400*  278*  778* 1278* 1278*  0 0*
   *WEAK AQUA COOLER    *    3.400* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY    *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555           0.000

114*XE-207-9            *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*    7.280*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY    *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555           0.000

104*XA-230-3            *   10.410*  378*  778*  579*  579*  0 0*
   *SULFUR STRIPPER     *   10.410*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032JOHN DOE INC.  *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0             7.396ECP TCP002

101*XA-207A             *   17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER     *   17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005JOHN DOE INC.  *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            10.215ECP TCM005

103*XA-215              *   13.520*  378*  778*  479*  479*  0 0*
   *STRONG ABSORBER     *   13.520*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032MANUFACTURER   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*12345           9.428ECP TCP002

110*XC-229-2            *    2.007*  478*  778*  479*  479*  679*
   *NEUT EXHAUST FAN    *    2.007*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY    *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0             0.000

109*XC-226-3            *    3.577*  478*  778*  579*  579*  679*
   *FILTRATE EXHAUST FAN*    3.577*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY    *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0             0.000

105*XC-208              *    2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER          *    2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045MANUFACTURER   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0             0.000ECP TCM005
```

```
                                   PROJ 575ZZZZ TEST CASE PLANT

                             +++ ACTUAL     AA            SORTED DATES REPORT +++
NO. EQ/DESCRP/PO VNDR     CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

209*XT-602-2              *    .325*  578* 1178* 1278* 1278*  0 0*
   *AIR RECEIVER          *    .325* 1177* 1277*  578*  0 0*  0 0*CRIT SCHEDCE TRANSFER
   * 1050IN HOUSE         *    .325*  0 0*  0 0*  0 0*  179*  0 0*     0            0.000

210*XE-701-4              *    .690*  0 0*  0 0*  0 0*  0 0*  0 0*INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER    *    .691* 1177* 1277*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1050IN HOUSE         *    .691*  0 0*  0 0*  0 0*  179*  0 0*     0            0.000ECP TCM005

204*XD-601                *   9.907*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER         *   9.873* 1277*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC      *   9.873*  0 0*  0 0*  0 0*  679*  0 0*55555             6.721

205*XK-602                *    .321*  478* 1078* 1078* 1078*  479*INSTALL DELAY DUE TO SNOW
   *AIR COMPRESSOR        *    .305*  178*  278*  0 0*  0 0*  0 0*
   * 1000FIX IT UP        *    .305*  0 0*  0 0*  0 0*  179*  0 0*     0            0.000ECP TCM005

207*XP-601-2A-            *    .871*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS   *    .869*  178*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC      *    .869*  0 0*  0 0*  0 0*  679*  0 0*55555             0.000

203*XT-514-3              *   1.516*  378*  379*  379*  379*  0 0*
   *CHILL WATER EXP TANK  *   1.704*  478*  0 0*  0 0*  0 0*  0 0*
   * 1111REPAIRS INC      *   1.704*  0 0*  0 0*  0 0*  679*  0 0*55555             0.000ECP TCP002

201*XJ-514                *   1.215*  378*  279*  279*  379*  679*INSTALL DELAY DUE TO SNOW
   *REFRIGERATION SYSTEM  *   1.213*  478*  478*  0 0*  0 0*  0 0*
   * 1111FIX IT UP        *   1.213*  0 0*  0 0*  0 0*  679*  0 0*55555             0.000ECP TCP002
```

```
                                  PROJ 575ZZZZ TEST CASE PLANT

                      +++ SCHEDULED BS             SORTED DATES REPORT +++

NO. EQ/DESCRP/PO VNDR    CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

101*XA-207A            *   17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER    *   17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005JOHN DOE INC. *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          10.215ECP TCM005

103*XA-215             *   13.520*  378*  778*  479*  479*  0 0*
   *STRONG ABSORBER    *   13.520*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032MANUFACTURER  *    0.000*  0 0*  0 0*  0 0*  579*  0 0*12345            9.428ECP TCP002

104*XA-230-3           *   10.410*  378*  778*  579*  579*  0 0*
   *SULFUR STRIPPER    *   10.410*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032JOHN DOE INC. *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            7.396ECP TCP002

105*XC-208             *    2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER         *    2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045MANUFACTURER  *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000ECP TCM005

109*XC-226-3           *    3.577*  478*  778*  579*  579*  679*
   *FILTRATE EXHAUST FAN*   3.577*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000

110*XC-229-2           *    2.007*  478*  778*  479*  479*  679*
   *NEUT EXHAUST FAN   *    2.007*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000

113*XE-207-3           *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*   7.280* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY   *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555            0.000

114*XE-207-9           *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*   7.280*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY   *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555            0.000

115*XE-214-3           *    3.400*  278*  778* 1278* 1278*  0 0*
   *WEAK AQUA COOLER   *    3.400* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY   *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555            0.000

107*XC-219-9           *    6.805*  278*  279*  379*  379*  679*
   *PRIM FILT VACUM PMP *   0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *    0              *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000

106*XC-218-9           *    6.921*  678*  279*  379*  379*  679*
   *SEC FILT VACUUM PUMP*   0.000*  0 0*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED AWARD
   *    0              *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000

111*XC-233-6           *   21.625*  378*  479*  479*  579*  679*
   *EVAP VACUUM SYS    *    0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *    0              *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000

112*XC-236-4           *    9.215*  278*  479*  479*  579*  679*
   *VACUUM EJECT SYS   *    0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *    0              *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0            0.000
```

```
                                    PROJ 575ZZZZ TEST CASE PLANT

                            +++ SCHEDULED BS          SORTED DATES REPORT +++

NO. EQ/DESCRP/PO VNDR      CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

206*XA-603             *     2.421*   578* 1178* 1178* 1178*  0 0*
   *AIR DRYER          *     0.000*   0 0*  0 0*  0 0*  0 0*  0 0*REHAB PAST DUE
   *    0              *     0.000*   0 0*  0 0*  0 0*  179*  0 0*    0           0.000

203*XT-514-3           *     1.516*   378*  379*  379*  379*  0 0*
   *CHILL WATER EXP TANK*    1.704*   478*  0 0*  0 0*  0 0*  0 0*
   * 1111REPAIRS INC   *     1.704*   0 0*  0 0*  0 0*  679*  0 0*55555           0.000ECP TCP002

202*XP-514-2A-         *      .908*   378*  379*  279*  379*  679*
   *CHILLED WATER PUMPS *    0.000*   0 0*  0 0*  0 0*  0 0*  0 0*REHAB PAST DUE
   *    0              *     0.000*   0 0*  0 0*  0 0*  679*  0 0*55555           0.000

207*XP-601-2A-         *      .871*   478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS *     .869*   178*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC   *      .869*   0 0*  0 0*  0 0*  679*  0 0*55555           0.000

208*XS-601-3           *      .191*   0 0*  0 0*  0 0*  0 0*  0 0*ITEM TO BE DELETED FROM SOW
   *SAND FILTER        *     0.000*   0 0*  0 0*  0 0*  0 0*  0 0*REHAB NOT SCHEDULED
   *    0              *     0.000*   0 0*  0 0*  0 0*  0 0*  0 0*    0           0.000

204*XD-601             *     9.907*   478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER      *     9.873*  1277*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC   *     9.873*   0 0*  0 0*  0 0*  679*  0 0*55555           6.721
```

APPENDIX E

MILESTONE EXCEPTION REPORT (MER)

Milestone Exception Report (MER)

The MER format is the same as the SDR format except line 3 which is:

+++ MILESTONE EXCEPTION REPORT +++

The items are listed in order of equipment number except only items with a computer generated comment are listed. As in ESR the items are grouped by process area.

Computer Generated Comments in MER

The Comments generated are listed in order of priority and depends on the profile selected.

	Situation	Profile	Comments
1)	AA is blank (has no date) and BS or BC less than AS	0,3 1 2	PRIORITY AWARD DELIVERY PRIORITY REHAB TRANSFER PRIORITY REHAB INSTALL START
2)	AA is blank and AC less than current month	0,3 1,2	CRITICAL AWARD PAST DUE CRITICAL REHAB PAST DUE
3)	AA is blank and AS less than current month	0,3 1,2	AWARD PAST DUE REHAB PAST DUE
4)	AA and AS are blank	0,3 1,2	AWARD NOT SCHEDULED REHAB NOT SCHEDULED
5)	AA is blank and AC within 2 months of current month	0,3 1,2	NEAR TERM CRITICAL AWARD NEAR TERM CRITICAL REHAB
6)	AA is blank and AS within 2 months of current month	0,3 1,2	NEAR TERM SCHEDULED AWARD NEAR TERM SCHEDULED REHAB

Situation	Profile	Comments
7) AA is blank and AC within 2 months of AS	0,3	CRITICAL SCHEDULED AWARD
	1,2	CRITICAL SCHEDULED REHAB
8) BA is blank and CC or CS less than BS	0	PRIORITY DELIVERY TRANSFER
	1	PRIORITY TRANSFER INSTALL START
	2	PRIORITY INSTALL START/COMPL
	3	PRIORITY DELIVERY INSTALL START
9) CA is blank and DC or DS less than CS	0	CONTR START PRIOR TRANSFER
	1,3	PRIORITY INSTALL START/COMPL
	2	PRIORITY INSTALL COMPL TRANSFER
10) DA is blank and ES or EC less than DS	0	CHECK CONTRACTOR DATA
	1,3	PRIORITY INSTALL COMPL DEBUG
	2	PRIORITY TRANSFER DEBUG
11) AA has date, BA is blank and BC less than current month	0,3	CRITICAL DELIVERY PAST DUE
	1	CRITICAL CE TRANSFER PAST DUE
	2	CRITICAL INSTALLATION PAST DUE
12) AA has date, BA is blank and BS less than current month	0,3	DELIVERY PAST DUE
	1	CE TRANSFER PAST DUE
	2	INSTALLATION START PAST DUE
13) AA has date, BA is blank and BC within 2 months of current month	0,3	NEAR TERM CRITICAL DELIVERY
	1	NEAR TERM CRITICAL TRANSFER
	2	NEAR TERM INSTALLATION START
14) AA has date, BA is blank and BS within 2 months of current month	0,3	NEAR TERM SCHEDULED DELIVERY
	1	NEAR TERM CE TRANSFER
	2	NEAR TERM INSTALLATION START
15) AA has date, BA is blank and BC within 2 months of BS	0,3	CRITICAL SCHEDULED DELIVERY
	1	CRITICAL SCHEDULED CE TRANSFER
	2	CRITICAL SCHEDULED INSTAL STRT
16) AA and BA have dates, CA is blank and CC less than current month	0	TRANSFER DELAY
	1,3	CRITICAL INSTAL STRT PAST DUE
	2	CRIT INSTAL COMPLETE PAST DUE

	Situation	Profile	Comments
17)	AA and BA have dates, CA is blank and CS less than current month	0 1,3 2	TRANSFER DELAY INSTALL START PAST DUE INSTALL COMPL PAST DUE
18)	AA and BA have dates, CA is blank and CC within 2 months of current month	0 1,3 2	NEAR TERM TRANSFER NEAR TERM CRIT INSTALL START NEAR TERM CRIT INSTALL COMP
19)	AA and BA have dates, CA is blank and CS within 2 months of current month	0 1,3 2	NEAR TERM TRANSFER NEAR TERM INSTALL START NEAR TERM INSTALL COMPLETE
20)	AA and BA have dates, CA is blank and CC within 2 months of CS	0 1,3 2	N/A CRIT SCHED INSTALL START CRIT SCHED INSTALL COMPLETE
21)	AA, BA and CA have dates, DA is blank and DC less than current month	0 1,3 2	N/A CRIT INSTALL COMPL PAST DUE CRIT CE TRANSFER PAST DUE
22)	AA, BA and CA have dates, DA is blank and DS less than current month	0 1,3 2	N/A INSTALL COMPLETE PAST DUE CE TRANSFER PAST DUE
23)	AA, BA and CA have dates, DA is blank and DC within 2 months of current month	0 1,3 2	N/A NEAR TERM CRIT INSTALL COMPL NEAR TERM CRITICAL CE TRANSFER
24)	AA, BA and CA have dates, DA is blank and DS within 2 months of current month	0 1,3 2	N/A NEAR TERM INSTALL COMPLETE NEAR TERM SCHED CE TRANSFER

	Situation	Profile	Comments
25)	AA, BA and CA have dates, DA is blank and DC within 2 months of DS	0 1,3 2	N/A CRIT SCHED INSTALL COMPLETE CRIT SCHED CE TRANSFER
26)	AA, BA, CA and DA have dates, EA is blank and EC less than current month	0 1,2,3	N/A CRITICAL DEBUG PAST DUE
27)	AA, BA, CA and DA have dates, EA is blank and ES less than current month	0 1,2,3	N/A SCHED DEBUG PAST DUE
28)	AA, BA, CA and DA have dates, EA is blank and EC within 2 months of current month	0 1,2,3	N/A NEAR TERM CRITICAL DEBUG
29)	AA, BA, CA, DA have dates, EA is blank and ES within 2 months of current month	0 1,2,3	N/A NEAR TERM SCHED DEBUG
30)	AA, BA, CA, DA have dates, EA is blank and EC within 2 months of ES	0 1,2,3	N/A CRITICAL SCHED DEBUG

NOTE: N/A means the items with that particular situation do not appear in Milestone Exception Report.

```
                                   PROJ 575ZZZZ TEST CASE PLANT

                                  +++MILESTONE EXCEPTION REPORT+++

NO. EQ/DESCRP/PO VNDR      CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

101*XA-207A              *   17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER      *   17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005JOHN DOE INC.   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          10.215ECP TCM005

102*XA-214               *   20.305*  378*  778*  479*  479*  0 0*
   *WEAK ABSORBER        *   20.305* 1177*  478*  578*  0 0*  0 0*CRIT SCHEDINSTALL COMPLETE
   * 1032JOHN DOE INC.   *   20.690*  0 0*  0 0*  0 0*  579*  0 0*12345         18.327

103*XA-215               *   13.520*  378*  778*  479*  479*  0 0*
   *STRONG ABSORBER      *   13.520*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032MANUFACTURER    *    0.000*  0 0*  0 0*  0 0*  579*  0 0*12345           9.428ECP TCP002

104*XA-230-3             *   10.410*  378*  778*  579*  579*  0 0*
   *SULFUR STRIPPER      *   10.410*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032JOHN DOE INC.   *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           7.396ECP TCP002

105*XC-208               *    2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER           *    2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045MANUFACTURER    *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000ECP TCM005

106*XC-218-9             *    6.921*  678*  279*  379*  379*  679*
   *SEC FILT VACUUM PUMP*     0.000*  0 0*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED AWARD
   *     0               *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

107*XC-219-9             *    6.805*  278*  279*  379*  379*  679*
   *PRIM FILT VACUM PMP  *    0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *     0               *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

109*XC-226-3             *    3.577*  478*  778*  579*  579*  679*
   *FILTRATE EXHAUST FAN*     3.577*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY     *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

110*XC-229-2             *    2.007*  478*  778*  479*  479*  679*
   *NEUT EXHAUST FAN     *    2.007*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035ABC COMPANY     *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

111*XC-233-6             *   21.625*  378*  479*  479*  579*  679*
   *EVAP VACUUM SYS      *    0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *     0               *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

112*XC-236-4             *    9.215*  278*  479*  479*  579*  679*
   *VACUUM EJECT SYS     *    0.000*  0 0*  0 0*  0 0*  0 0*  0 0*AWARD PAST DUE
   *     0               *    0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

113*XE-207-3             *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY     *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555           0.000

114*XE-207-9             *    7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY     *    0.000*  0 0*  0 0*  0 0*  179*  0 0*55555           0.000
```

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                                         PROJ 575ZZZZ TEST CASE PLANT

                                        +++MILESTONE EXCEPTION REPORT+++

 NO. EQ/DESCRP/PO VNDR    CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

115*XE-214-3            *     3.400*  278*  778* 1278* 1278* 0 0*
   *WEAK AQUA COOLER    *     3.400* 1277*  0 0*  0 0*  0 0* 0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006ABC COMPANY    *     0.000*  0 0*  0 0*  0 0*  179* 0 0*55555         0.000
```

```
                                  PROJ 575ZZZZ TEST CASE PLANT

                                 +++MILESTONE EXCEPTION REPORT+++

NO. EQ/DESCRP/PO VNDR    CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

202*XP-514-2A-          *      .908*  378*  379*  279*  379*  679*
   *CHILLED WATER PUMPS *     0.000*  0 0*  0 0*  0 0*  0 0*  0 0*REHAB PAST DUE
   *    0               *     0.000*  0 0*  0 0*  0 0*  679*  0 0*55555          0.000

204*XD-601              *     9.907*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER       *     9.873* 1277*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC    *     9.873*  0 0*  0 0*  0 0*  679*  0 0*55555          6.721

206*XA-603              *     2.421*  578* 1178* 1178* 1178*  0 0*
   *AIR DRYER           *     0.000*  0 0*  0 0*  0 0*  0 0*  0 0*REHAB PAST DUE
   *    0               *     0.000*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000

207*XP-601-2A-          *      .871*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS *      .869*  178*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000REPAIRS INC    *      .869*  0 0*  0 0*  0 0*  679*  0 0*55555          0.000

208*XS-601-3            *      .191*  0 0*  0 0*  0 0*  0 0*  0 0*ITEM TO BE DELETED FROM SOW
   *SAND FILTER         *     0.000*  0 0*  0 0*  0 0*  0 0*  0 0*REHAB NOT SCHEDULED
   *    0               *     0.000*  0 0*  0 0*  0 0*  0 0*  0 0*    0          0.000

209*XT-602-2            *      .325*  578* 1178* 1278* 1278*  0 0*
   *AIR RECEIVER        *      .325* 1177* 1277*  578*  0 0*  0 0*CRIT SCHEDCE TRANSFER
   * 1050IN HOUSE       *      .325*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000

210*XE-701-4            *      .690*  0 0*  0 0*  0 0*  0 0*  0 0*INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER  *      .691* 1177* 1277*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1050IN HOUSE       *      .691*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000ECP TCM005
```

APPENDIX F

SPECIAL REPORTS

Special Reports

The Special Report format is the same as the SDR format except line 3 which is:

```
+++ SPECIAL REPORTS SORTED BY XXX/YYY +++
```

where XXX is the category selected (NET, PO, etc) and YYY is the restriction selected (ALL, AS, etc).

The items are listed in order of XXX and grouped by profile number. If YYY is not ALL, only the items corresponding to the restriction selected will be listed.

The computer generated comments are the same as the Milestone Exception Report (see Appendix E).

```
                                    PROJ 575ZZZZ TEST CASE PLANT

                                 +++ SPECIAL REPORTS SORTED BY VND/AA  +++

NO. EQ/DESCRP/PO VNDR      CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

109*XC-226-3            *     3.577*  478*  778*  579*  579*  679*
   *FILTRATE EXHAUST FAN*     3.577*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035 ABC COMPAY    *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000

110*XC-229-2            *     2.007*  478*  778*  479*  479*  679*
   *NEUT EXHAUST FAN    *     2.007*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035 ABC COMPAY    *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000

113*XE-207-3            *     7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY    *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555          0.000

114*XE-207-9            *     7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY    *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555          0.000

115*XE-214-3            *     3.400*  278*  778* 1278* 1278*  0 0*
   *WEAK AQUA COOLER    *     3.400* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY    *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555          0.000

101*XA-207A             *    17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER     *    17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005 JOHN DOE NC.  *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0         10.215ECP TCM005

102*XA-214              *    20.305*  378*  778*  479*  479*  0 0*
   *WEAK ABSORBER       *    20.305* 1177*  478*  578*  0 0*  0 0*CRIT SCHEDINSTALL COMPLETE
   * 1032 JOHN DOE NC.  *    20.690*  0 0*  0 0*  0 0*  579*  0 0*12345         18.327

104*XA-230-3            *    10.410*  378*  778*  579*  579*  0 0*
   *SULFUR STRIPPER     *    10.410*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032 JOHN DOE NC.  *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          7.396ECP TCP002

103*XA-215              *    13.520*  378*  778*  479*  479*  0 0*
   *STRONG ABSORBER     *    13.520*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032 MANUFACTUER   *     0.000*  0 0*  0 0*  0 0*  579*  0 0*12345          9.428ECP TCP002

108*XC-219-11           *     1.750*  478* 1278*  379*  379*  679*INSTALL DELAY DUE TO SNOW
   *FILTR TNK CO2 INJECT*     1.750* 1277*  478*  0 0*  0 0*  0 0*
   * 1010 MANUFACTUER   *     1.750*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000ECP TCM005

105*XC-208              *     2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER          *     2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045 MANUFACTUER   *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000ECP TCM005
```

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                         PROJ 575ZZZZ TEST CASE PLANT

                    +++ SPECIAL REPORTS SORTED BY VND/AA  +++

NO. EQ/DESCRP/PO VNDR    CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

205*XK-602              *     .321*  478* 1078* 1078* 1078*  479*INSTALL DELAY DUE TO SNOW
   *AIR COMPRESSOR      *     .305*  178*  278*  0 0*  0 0*  0 0*
   * 1000 FIX IT UP     *     .305*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000ECP TCM005

201*XJ-514              *    1.215*  378*  279*  279*  379*  679*INSTALL DELAY DUE TO SNOW
   *REFRIGERATION SYSTEM*    1.213*  478*  478*  0 0*  0 0*  0 0*
   * 1111 FIX IT UP     *    1.213*  0 0*  0 0*  0 0*  679   0 0*55555          0.000ECP TCP002

209*XT-602-2            *     .325*  578* 1178* 1278* 1278*  0 0*
   *AIR RECEIVER        *     .325* 1177* 1277*  578*  0 0*  0 0*CRIT SCHEDCE TRANSFER
   * 1050 IN HOUSE      *     .325*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000

210*XE-701-4            *     .690*  0 0*  0 0*  0 0*  0 0*  0 0*INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER  *     .691* 1177* 1277*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1050 IN HOUSE      *     .691*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000ECP TCM005

203*XT-514-3            *    1.516*  378*  379*  379*  379*  0 0*
   *CHILL WATER EXP TANK*    1.704*  478*  0 0*  0 0*  0 0*  0 0*
   * 1111 REPAIRS IC    *    1.704*  0 0*  0 0*  0 0*  679*  0 0*55555          0.000ECP TCP002

207*XP-601-2A-          *     .871*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS *     .869*  178*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000 REPAIRS IC    *     .869*  0 0*  0 0*  0 0*  679*  0 0*55555          0.000

204*XD-601              *    9.907*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER       *    9.873* 1277*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000 REPAIRS IC    *    9.873*  0 0*  0 0*  0 0*  679*  0 0*55555          6.721
```

```
                              PROJ 575ZZZZ TEST CASE PLANT

                      +++ SPECIAL REPORTS SORTED BY CP /AA  +++

NO. EQ/DESCRP/PO VNDR     CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

108*XC-219-11            *     1.750*  478* 1278*  379*  379*  679*INSTALL DELAY DUE TO SNOW
   *FILTR TNK CO2 INJECT*     1.750* 1277*  478*  0 0*  0 0*  0 0*
   * 1010 MANUFACTUER    *     1.750*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000ECP TCM005

110*XC-229-2             *     2.007*  478*  778*  479*  479*  679*
   *NEUT EXHAUST FAN     *     2.007*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035 ABC COMPAY     *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

105*XC-208               *     2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER           *     2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045 MANUFACTUER    *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000ECP TCM005

115*XE-214-3             *     3.400*  278*  778* 1278* 1278*  0 0*
   *WEAK AQUA COOLER     *     3.400* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY     *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555       0.000

109*XC-226-3             *     3.577*  478*  778*  579*  579*  679*
   *FILTRATE EXHAUST FAN*     3.577*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1035 ABC COMPAY     *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           0.000

113*XE-207-3             *     7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280* 1277*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY     *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555       0.000

114*XE-207-9             *     7.280*  278*  778* 1278* 1278*  679*
   *CARBONATE LIQ COOLER*     7.280*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1006 ABC COMPAY     *     0.000*  0 0*  0 0*  0 0*  179*  0 0*55555       0.000

104*XA-230-3             *    10.410*  378*  778*  579*  579*  0 0*
   *SULFUR STRIPPER      *    10.410*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032 JOHN DOE NC.   *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0           7.396ECP TCP002

103*XA-215               *    13.520*  378*  778*  479*  479*  0 0*
   *STRONG ABSORBER      *    13.520*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1032 MANUFACTUER    *     0.000*  0 0*  0 0*  0 0*  579*  0 0*12345       9.428ECP TCP002

101*XA-207A              *    17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER      *    17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005 JOHN DOE NC.   *     0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          10.215ECP TCM005

102*XA-214               *    20.305*  378*  778*  479*  479*  0 0*
   *WEAK ABSORBER        *    20.305* 1177*  478*  578*  0 0*  0 0*CRIT SCHEDINSTALL COMPLETE
   * 1032 JOHN DOE NC.   *    20.690*  0 0*  0 0*  0 0*  579*  0 0*12345      18.327
```

```
                                   PROJ 575ZZZZ TEST CASE PLANT

                                +++ SPECIAL REPORTS SORTED BY CP /AA  +++

NO. EQ/DESCRP/PO VNDR     CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

205*XK-602              *    .321*  478* 1078* 1078* 1078*  479*INSTALL DELAY DUE TO SNOW
   *AIR COMPRESSOR      *    .305*  178*  278*  0 0*  0 0*  0 0*
   * 1000 FIX IT UP     *    .305*  0 0*  0 0*  0 0*  179*  0 0*    0            0.000ECP TCM005

209*XT-602-2            *    .325*  578* 1178* 1278* 1278*  0 0*
   *AIR RECEIVER        *    .325* 1177* 1277*  578*  0 0*  0 0*CRIT SCHEDCE TRANSFER
   * 1050 IN HOUSE      *    .325*  0 0*  0 0*  0 0*  179*  0 0*    0            0.000

210*XE-701-4            *    .690*  0 0*  0 0*  0 0*  0 0*  0 0*INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER  *    .691* 1177* 1277*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1050 IN HOUSE      *    .691*  0 0*  0 0*  0 0*  179*  0 0*    0            0.000ECP TCM005

207*XP-601-2A-          *    .871*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER PUMPS *    .869*  178*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000 REPAIRS IC    *    .869*  0 0*  0 0*  0 0*  679*  0 0*55555               0.000

201*XJ-514              *   1.215*  378*  279*  279*  379*  679*INSTALL DELAY DUE TO SNOW
   *REFRIGERATION SYSTEM*   1.213*  478*  478*  0 0*  0 0*  0 0*
   * 1111 FIX IT UP     *   1.213*  0 0*  0 0*  0 0*  679*  0 0*55555               0.000ECP TCP002

203*XT-514-3            *   1.516*  378*  379*  379*  379*  0 0*
   *CHILL WATER EXP TANK*   1.704*  478*  0 0*  0 0*  0 0*  0 0*
   * 1111 REPAIRS IC    *   1.704*  0 0*  0 0*  0 0*  679*  0 0*55555               0.000ECP TCP002

204*XD-601              *   9.907*  478*  0 0*  0 0*  479*  679*FIELD CONSTRUCTED
   *COOLING TOWER       *   9.873* 1277*  0 0*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1000 REPAIRS IC    *   9.873*  0 0*  0 0*  0 0*  679*  0 0*55555               6.721
```

```
                                       PROJ 575ZZZZ TEST CASE PLANT

                                    +++ SPECIAL REPORTS SORTED BY HOL/SEL +++

NO. EQ/DESCRP/PO VNDR    CN/CP/CF  AWARD DLVRY ISTRT ICOMP DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78

108*XC-219-11            *      1.750*  478* 1278*  379*  379*  679*INSTALL DELAY DUE TO SNOW
   *FILTR TNK CO2 INJECT*      1.750* 1277*  478*  0 0*  0 0*  0 0*
   * 1010 MANUFACTUER    *      1.750*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000ECP TCM005

105*XC-208               *      2.114*  478*  778*  579*  579*  679*
   *AIR BLOWER           *      2.114*  378*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1045 MANUFACTUER    *      0.000*  0 0*  0 0*  0 0*  579*  0 0*    0          0.000ECP TCM005

101*XA-207A              *     17.067*  278*  778*  279*  279*  0 0*
   *CARBONATE TOWER      *     17.067*  278*  0 0*  0 0*  0 0*  0 0*NEAR TERM SCHEDULED DELIVERY
   * 1005 JOHN DOE NC.   *      0.000*  0 0*  0 0*  0 0*  579*  0 0*    0         10.215ECP TCM005
```

```
                                    PROJ 575ZZZZ TEST CASE PLANT

                                +++ SPECIAL REPORTS SORTED BY HOL/SEL +++
NO. EQ/DESCRP/PO VNDR     CN/CP/CF  REHAB ISTRT ICOMP TRNSF DEBUG S CMT/CP CMT/NET  FPNUM  HOL  DATE  06/02/78
205*XK-602              *       .321*  478* 1078* 1078* 1078*  479*INSTALL DELAY DUE TO SNOW
   *AIR COMPRESSOR      *       .305*  178*  278*  0 0*  0 0*  0 0*
   * 1000 FIX IT UP     *       .305*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000ECP TCM005

210*XE-701-4            *       .690*  0 0*  0 0*  0 0*  0 0*  0 0*INSTALL DELAY DUE TO SNOW
   *AMM NITRATE HEATER  *       .691* 1177* 1277*  0 0*  0 0*  0 0*PRIORITY  INSTAL COMPL TRANSF
   * 1050 IN HOUSE      *       .691*  0 0*  0 0*  0 0*  179*  0 0*    0          0.000ECP TCM005
```

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18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Pacers	Performance	Equipment	Requirements
Status	Data Base	Management	Sorts
Costs	Vendor	Purchase Order	Scheduled Dates
Actual Dates	Critical Dates	Computer	ARRADCOM
Update	Network Numbers	Milestone	Award

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

PACERS provides management and field personnel with a powerful equipment monitoring program that allows users to track the status of various items. Through interactive computer data base updating, milestone interface dates (i.e. award, delivery, etc.) are analyzed providing the user appropriate managerial diagnostics in project terms. Other information, such as, purchase order numbers, vendors, component names and nomenclature, costs, network numbers may be retained and sorted. Additionally, semi-graphic displays

19. KEY WORDS (continued)

Delivery Installation Transfer Rehabilitation
Interactive Monitoring

20. Abstract (continued)

show milestone bar charts for each component item (equipment). The generated equipment status report provides the project's performance and current requirements/schedules for effective project planning and execution.

79